



## Product Data Sheet

### Description

willseal 600 is a precompressed, self-expanding polyurethane foam joint sealant that is designed to seal against rain, wind, sound, draft and dust. Unlike other conventional methods, willseal 600 is not susceptible to breakdowns caused by excessive joint movements, joint strain, surface contamination, aging and general tensile stress-caused failures. It does not dry out, shrink or deteriorate. There's no mixing, no masking, no staining and no mess. willseal 600 can be installed under many weather and temperature conditions.

### Material

Open cell polyurethane flexible foam impregnated with a flame retardant modified acrylic. Supplied precompressed with PSA on one side.

### Colors

- black
- grey (on request)

### Dimensions

- Joint sizes from 1/8" to 1 1/2" in rolls
- Joint sizes from 1 3/4" and wider in sticks

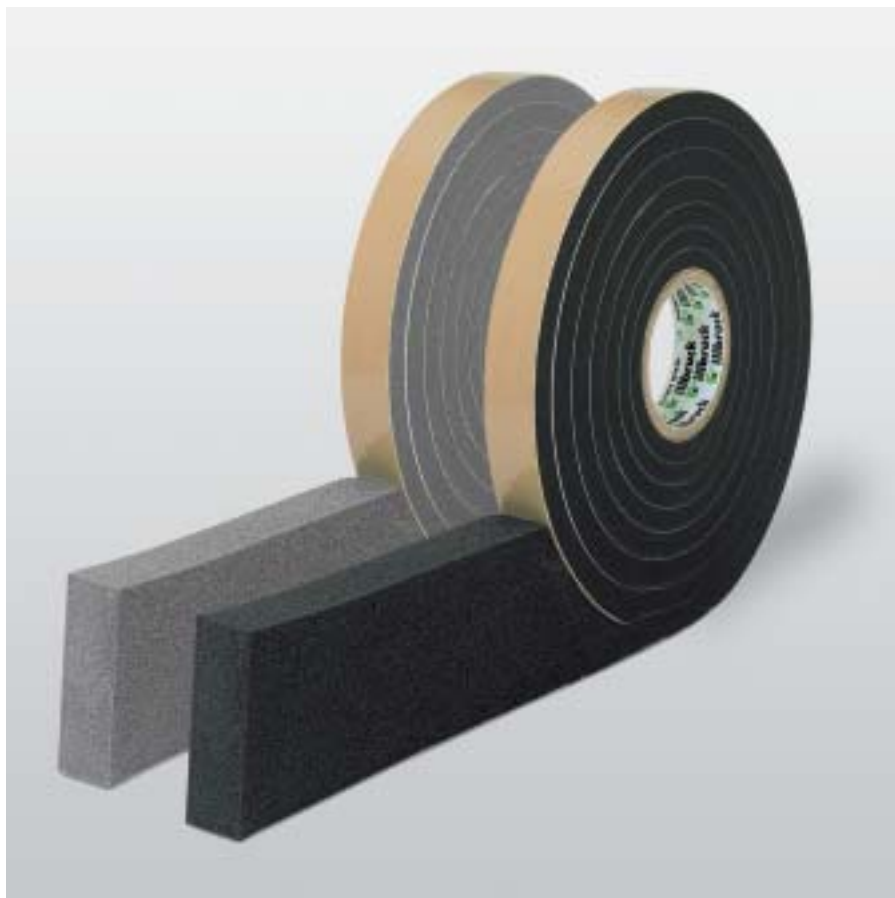
### Applications

willseal 600 is ideal in any joint, in almost any primary or secondary application, including:

- Pre-cast concrete
- Masonry/Brick
- Metal Flashing
- Window and Door Installation
- Tilt-up Panels
- Roofing
- Exterior Wall Systems
- Metal Curtain Walls
- Log Homes
- Factory Built Housing
- Recreational Vehicles

<sup>1</sup> Attachment method of willseal 600 was in a single joint compressed to 50% of original foam thickness. Joint material was constructed of calcium silicate board and is representative of field installation of the product.

<sup>2</sup> Due to the conditions set by illbruck, certain restrictions apply. Inquire with illbruck for details.



 **illbruck** willseal 600

### Tested Physical Properties illbruck willseal 600

Property	Test Method	Value
Color		Black/Grey
Density	ASTM D 3574	5.5 – 6.5 lb/ft <sup>3</sup> (90 – 110 kg/m <sup>3</sup> )
Thermal Conductivity	ASTM C 518	0.28 – 0.30 Btu-in/hr-°F-ft <sup>2</sup>
Thermal Resistance	ASTM C 518	3.3 – 3.6 hr-°F-ft <sup>2</sup> /Btu
Tensile Strength	ASTM D 3574	21 psi min.
Temperature Stability Range		
Short Term		– 40 °C / – 40 °F to 120 °C / 248 °F
Long Term		– 40 °C / – 40 °F to 90 °C / 194 °F
Elongation	ASTM D 3574	120% +/- 20%
Compression Set	ASTM D 3574	4.2% max.
Staining and Bleeding	DIN 18 542	Meets DIN requirements
Resistance to UV and Moisture	DIN 18 542	Meets DIN requirements
Shelf Life		2 years
Water Resistance	ASTM E 331 ASTM E 547	12 psf 12 psf
Fire Testing	ASTM E 84 <sup>1</sup>	Flame Spread: 0, Smoke Developed: 5
Compatibility with conventional construction materials	DIN 52 423	No signs of corrosion were observed on zinc, steel, galvanized steel, aluminium and copper; no adverse effects with concrete, aerated concrete, brick, some natural stone, PVC, Plexiglas and wood; for other materials consult illbruck
Ideal Storage Temperature		34 °F – 68 °F
Performance Guarantee		10 year warranty <sup>2</sup> on performance

# Product Instructions

## willseal 600®

### Suggested Tools

For installation you need a tape measure, spatula/putty knife, scissors/knife and possibly wood shims.

### Application

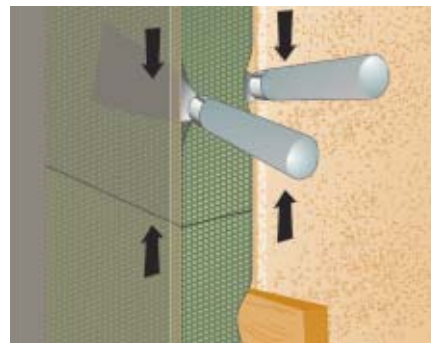
- After measuring the joint, choose the appropriate tape size based on the joint size (see table below).
- Cut off the over-compressed parts of the willseal 600 at the beginning and end of the roll (first 2").
- Add at least 1 cm to the measured length and cut the willseal 600.
- For vertical joint start to work from the bottom and end the willseal 600 in a butt joint to terminate the willseal tape to tape (see Drawing C + A).
- For appearance reasons, willseal 600 should be installed recessed 1 – 2 mm.



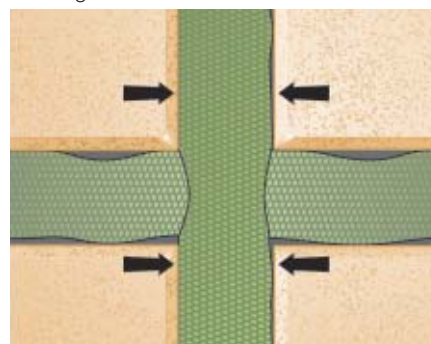
Drawing A



Drawing C



Drawing B



Drawing D

### Limitations

- Wet joints can inactivate the PSA. In this case fix willseal 600 with wood shims until the tape has expanded (see Drawing B).
- If covering willseal 600 with silicones or caulk conduct a compatibility test or contact illbruck for recommendations.
- Direct contact with solvent based paints and corrosive chemical agents is not recommended.
- Refer to the illbruck sizing chart to avoid over-compression.

### Installation Tips: Windows

- Do not fix the tape around corners.
- Tape should be fixed at the corner to form a butt joint (see Drawing A).

### Unique Properties

- Driving rain tight to 12 psf
- "Breathable" (vapor permeable)
- Paintable with water based paints
- Flame Spread: 0,  
Smoke Developed: 5

US item #	Joint Opening weather tight exterior application			Joint Depth tape width			Lft per box
	mm	decimal	fraction	mm	decimal	fraction	
23252	3	.11 – .12	1/8"	10	.38	3/8"	975'
23253	3 – 7	.11 – .27	1/8" to 1/4"	15	.59	19/32"	520'
22756	5 – 10	.19 – .39	3/16" to 3/8"	20	.75	3/4"	270'
23255	7 – 12	.27 – .47	9/32" to 1/2"	15	.59	19/32"	280'
23256	8 – 15	.31 – .59	5/16" to 5/8"	20	.75	3/4"	157.5'
23257	10 – 18	.39 – .70	3/8" to 3/4"	25	.98	1"	252'
23258	13 – 24	.51 – .94	1/2" to 1"	30	1.18	1 – 3/16"	170'
23259	17 – 32	.66 – 1.26	11/16" to 1 – 1/4"	40	1.57	1 – 9/16"	91'
23260	24 – 40	.94 – 1.57	1" to 1 – 9/16"	50	1.97	2"	51'

### Installation Tips: Prefab Parts

- During the installation of the prefabricated parts, distance holders must be used to prevent over-compression of the willseal 600.
- In the case of porous or absorbing substrates treat the substrates with a hydrophobic liquid.
- For horizontal joints put the PSA to the bottom side

### Installation Tips: Cross Joint

- At the cross joint, install as per drawing D. First install the willseal 600 on the horizontal joint with the PSA side faced down. Next, install the vertical joint, ensuring the surfaces between the horizontal and vertical joints are flush to each other.

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